

# ED STATES PATENT AND TRADEMARK OFFICE

Applicants: Roger R. Lesieur

Docket No.: C-2354

Serial No.: 09/332,415

Group: 1764

Filed: June 14, 1999

Examiner: B. Ridley

For: "Compact and Light Weight Methanol Fuel Gas Autothermal Reformer Assembly"

## AMENDMENT B UNDER RULE 116 AND REQUEST FOR RECONSIDERATION

Hon. Commissioner of Patents and Trademarks Washington, D.C. 20231

### Dear Sir:

This is responsive to the Official Office Action final rejection dated December 27, 2000. Please amend the above-identified application as follows.

## IN THE SPECIFICATION:

On page 6, line 4, please delete "small", first occurrence, and insert --smaller--; and in line 19, please delete "nobel" and insert --noble--.

IN THE CLAIMS:

In Claim 1, in the last line of clause b), please delete "processed" and insert --process--.

In Claim 2, line 2, after "metal", please insert -- catalyst -- .

In Claim 9, line 2, please please delete "and", first occurrence.

In Claim 22, line 14, please delete "processed" and insert --process--.

### REMARKS

The specification has been amended to correct two typographical errors. Claims 1, 2, 7, 9, 12-20, 22 and 23 have been submitted for examination. Claims 1-19 stand rejected as being indefinite for several reasons. First of all, Claims 1-19 do not exist in this application at this point in time. This is obviously another typographical error, and therefore the specific claims in question will be addressed. Claim 1 has been

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amended to delete the term "processed", thereby obviating the rejection of this claim. Claim 2 has been amended to provide antecedence for the phrase "noble metal catalyst" thereby obviating the rejection of Claim 9. Claim 23 has been amended to delete the term "processed", so as to obviate a potential rejection which has not been noted by the Examiner, and was only discovered by the undersigned after the latest office action. It is submitted that all of the §112 rejections have been addressed and have been rendered moot. These rejections should therefore be withdrawn.

Claim 23 stands rejected as being obvious over the combination of Clawson in view of Narumiya et al and further in view of Setzer.

Claims 1, 2, 7, 9, 12-20, and 22 stand rejected as being obvious over the combination of Clawson in view of Narumiya et al and further in view of Setzer et al '484, and still further in view of Dicks.

Claim 18 stands rejected as being obvious over Clawson in view of Narumiya et al, further in view of Setzer et al '484 and further in view of Dicks, and still further in view of Bhattacharyya et al.

Claims 1, 2, 7, 9, 12-18, 20 and 22 stand provisionally rejected under the judicially created doctrine of obviousness double patenting as being unpatentable over Claims 1-22 of co-pending application USSN 09/321,390 in view of Dicks.

Claims 19 and 23 stand provisionally rejected under the judicially created doctrine of obviousness double patenting as being unpatentable over the subject matter of Claims 1-22 of co-pending application USSN 09/321,390 in view of Dicks and further in view of Clawson.

We note that all of the §103 rejections are completely different than the §103 rejections put forth in the first office action. We also note that the Examiner states that the applicant's amendments necessitated the new grounds for rejection presented in the final rejection. It seems to the undersigned that this statement can only relate to the

new rejections which utilize the Dicks reference, which is newly cited, and which relates to the addition of the zinc and copper catalysts in the system. The final rejection of Claim 23 was certainly not necessitated by any amendments to Claim 23. The finality of the rejection of at least this claim is improper, and therefore the finality of the entire office action is improper.

We note that the 35 USC 101 rejection has been tacitly withdrawn.

### THE 35 USC §103 REJECTIONS

We note that the Examiner is relying on Setzer et al '484 to provide a teaching of an autothermal reformer which is operable to combust a portion of the fuel gas being reformed at temperatures which are claimed in the instant application. Specifically, Claims 1, 2, 7, 9 and 12-19 recite a temperature in the range of about 300°F to about 500°F; and Claims 22 and 23 recite a temperature of 200°F as a result of the controlled fuel combustion. The partial fuel combustion takes place at the inlet end of the catalyst bed. In each of the arguments advanced by the Examiner in supporting her application of Setzer et al '484 as providing the necessary teaching, she has referred to Col. 4, lines 29-66 of the patent. That section of the patent describes FIG. 4 of the patent. In order to ascertain the catalyst bed inlet end temperatures caused by the partial fuel combustion suggested in Setzer et al '484, one must look at FIG. 3 of the patent. FIG. 3 of the patent makes it quite clear that the inlet temperatures created by partial combustion of the fuel gas are in excess of 1,200°E, which is well in excess of the subject matter of all but Claim 20 of the instant application. On page 4 of the office action, the Examiner states: "Setzer et al teaches an inlet portion of a catalyst bed being provided with a catalyst which is operable to combust a portion of the fuel gas stream at a temperature of about 200°F (C4/L29-66).". This assessment by the Examiner of the teachings of Setzer et al has been carefully considered, but it is not pursuasive, and it is clearly erroneous.

### The "Response to Arguments" Section

In the "Response to Arguments" section of the office action, on pages 14 and 15, the

Examiner devotes some time to an argument that she is one of ordinary skill in the art of fuel gas reforming. This response is moot in this case since the §112 rejections have been withdrawn; however, should the Examiner advance similar arguments in other applications which she is examining before us, she will have to provide affidavit(s) attesting to her education; employment history; patents obtained, if any; and any other pertinent information regarding her level of skill in the art of fuel processing for a fuel cell power plant which will be made a part of the record and which will factually establish her credentials as one of ordinary skill in the art in question.

In several areas in this section of the final rejection, the Examiner has indicated that she is not relying on the entirety of the Narumiya et al reference which has been cited in rejecting each of the claims in this application. In the final rejection the Examiner states that she is only relying on part of the Narumiya et al reference, i.e., on the use of a cylindrical foam support for a catalyst bed and she is ignoring the remainder of the reference in question, i.e., the fact that the Narumiya et al catalyst bed is an oxidizing catalyst bed which burns hydrocarbons in an internal combustion engine exhaust. The reason for this selective analysis of Narumiya et al is of course because of the contents of the instant application. The Examiner is using the instant application as a guide which indicates to her what structure in Narumiya et al should be selected and what should be ignored. It is impermissible within the framework of section 103 to pick and choose from any one reference only so much of it as will support a given position, to the exclusion of other parts necessary to the full appreciation of what such reference fairly suggests to one of ordinary skill in the art. See: In re Umbricht, 160 USPQ 15 (CCPA 1968). See also In re Wesslau, 147 USPQ 391 (CCPA).

### THE OBVIOUSNESS-TYPE DOUBLE PATENTING REJECTIONS

We note that these rejections are all provisional rejections which have no effect unless and until either this application or the copending application is allowed.

Respectfully submitted

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